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ABSTRACT

Based on the relocation of the University of Tennessee Knoxville (UTK) Library, this paper explores the importance of communication in project management. Definitions of project management are followed by an overview of the UTK move and discussions of the role of the project director, possible causes of mismatches between responsibilities and authority, and ways that the project director can gain influence. The year and a half planning phase of the UTK move is then described, as well as methods of interfacing--e.g., meetings and training programs--between the project management team and independently working individuals and groups, such as library staff and outside contractors, are described. Examples of several forms of communication--person-to-group, person-to-person, and intragroup--conclude the paper. (7 references) (MES)

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Moving a 1.5 Million-Volume Library:

A Study of Communication in Project Management

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July 10, 1988

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Moving a 1.5 Million-Volume Library: A Study of Communication in Project Management

INTRODUCTION

Moving a large university library requires multi-directional and multi-level communication throughout the planning and implementation stages of the project. Strategies must be developed for leadership, communication, and task orientation in order to complete a multitude of simultaneous and sequential events through the work of others.

The seven-week move of the University of Tennessee, Knoxville (UTK) Library was actually a project taking more than a year and a half of detailed planning before any book was moved. Because the Library Relocation Office had only a project manager and part-time office staff, communication skills were needed for recruitment and persuasion of library staff members to give priority to move projects and to take on special assignments. Communication of plans and methods went both up and down in the organization: the library administrators in many cases took direction from the move-planning team. The development of good working relationships were necessary with physical plant staff because they were to provide much of the "move muscle" when relocation began. Coordination with architects, contractors, and various university offices was vital, particularly at the operational phase.

Communications were also required to allay fears of disruption of normal work for library staff and disruption of services for the university community. A special relocation bulletin was issued regularly; presentations to faculty and student groups were given to provide information on the move process and its effects; various press releases and articles were written.

VIEWPOINT

There are three major points to be made in this paper: 1) that communication is a significant component of all project management activities, one that must receive conscious and positive consideration throughout the life of a project; 2) that the efforts and resources expended on communicating will contribute to the project's success; and, 3) that lessons learned from communication activities in a major library project may be applied outside the project framework, in ongoing management and as libraries seek new organizational structures in the future.

Project management literature has been of assistance in the search for context and structure for the experiences of the UTK Library's 21-month move project. Therefore, this paper uses elements of project management as a structural device for the discussion of specific activities relating to communication and leadership in the relocation of a large library.

PROJECT MANAGEMENT: DEFINITIONS

Harvard University's Richard P. Olsen defines project management as

> ...the application of a collection of tools and techniques (such as the critical path method, CPM, and the matrix organization) to direct the use of diverse resources toward the accomplishment of a unique, complex one-time task within time, cost, and quality constraints. Each task requires a structure to fit the task environment and the life cycle (from conception to completion) of the task (Olsen 1981, 19).

Developed during the early 1960s, project management grew out of large-scale tasks such as the Manhattan project, the space program, and large construction projects. Its use of special techniques for project planning, scheduling, and costing gradually brought recognition that project management is different from on-going management. In the 1970s, within project management circles, emphasis changed from development of mechanisms for control to consideration of concepts and techniques for the human side, the behavioral and organizational aspects, of the projects to be managed.

In a very useful and pragmatic book, Human Factors in Project Management, Paul Dinsmore provides definitions of project management that recognize this human-factors orientation.

> A **project** is a unique venture with a beginning and an end, conducted by people to meet established goals within parameters of cost, schedule, and quality. **Project management** is the mixture of people, systems and techniques required to carry the project to successful completion (Dinsmore 1984, 10).

Dinsmore goes on to elaborate on project management in terms of time, money, quality, systems, and especially, people.

> Getting things done through people is project management's major goal. For a project to be successful, people must work together. Team building, conflict-management, and communication skills are people-related

> abilities needed to make project activities work. Everything on a project starts with people. And a project progresses as a result of human interaction. (Dinsmore 1984, 12)

TASK AT UTK

Simply stated, the unique venture at UTK required relocation of 1.5 million volume equivalents of library materials along with much of the equipment and furniture for twenty-eight departments, from four different locations to a new building in the center of campus. It also required the extraction of a preservation collection from a larger "storage" collection and the transport of these fragile materials back to the old "main" library building as space was cleared for them. The ever-changing schedules for completion of the new building; delivery and installation of new furnishings, wiring, carpeting, and shelving; and relocation of shelving for 250,000 volumes were variables that affected project plans and schedules through much of the implementation period. Development of special services, such as a paging service for temporarily closed stacks and a move information desk, were important mechanisms to meet user needs during the seven-week move.

The time factor--living and working with concrete deadlines --makes a relocation project very different from regular library operations. Within normal library operations there are deadlines, certainly, but these rarely have such radical implications for availability of library materials as the prospect of an

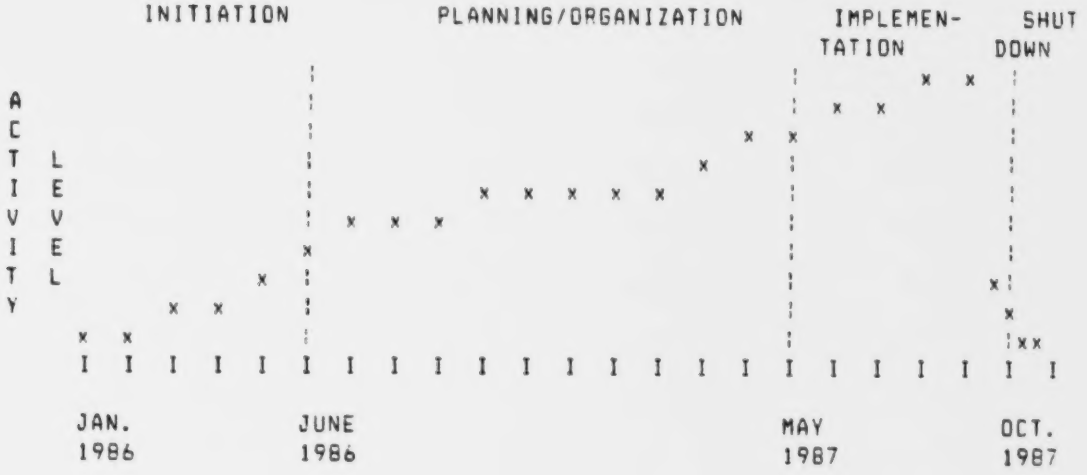
unfinished move of collections and service points at the beginning of fall term. Such a prospect is truly a deadline.

At UTK, the project began with appointment of the project manager in January 1986. The move itself was scheduled originally to begin in June 1987, eventually rescheduled to start in August 1987, and always had a firm completion date of September 24, 1987--the first day of fall quarter classes, when 25,000 students were expected back on campus and when the project's student movers would no longer be available. To add even more pressure to the deadline, grand dedication ceremonies were scheduled for September 25 to celebrate the opening of the largest academic building ever built with state funds in Tennessee. The life of the project, at least its start and finish, were clearly defined from the beginning.

Project life cycles have been described as having four distinct phases: conceptual (project initiation), planning (project organization), implementation (accomplishing the major work of the project), and termination or shut-down (Adams 1981, 129-130). Figure 1 illustrates the levels of project activity in the University of Tennessee move as distributed over the four phases of the project life cycle.

No one in the library organization doubted that the collections and equipment would be moved; almost everyone doubted that the project would be completed prior to fall term. Because classes were in session in August, the library had to find ways

Figure 1. Project Life Cycle for the UTK Library Move



to do "business as usual" while relocating everything. The use of physical plant staff and students instead of commercial movers added to uncertainty about feasibility and the schedule. In June and July, staff could have been described as unsure, uncertain, nervous people. Many individuals believed that once the relocation began, every day of the operational phase would be a nightmare.

Contrary to these expectations, the move was a success. Once it was underway, morale was always high, and people even enjoyed the project. The relocation proceeded according to plan with all collections and departments in place by September 18, with one week to spare. Success in this case is attributable to many factors, but the attention paid to communication needs and the use of a variety of communication vehicles definitely were

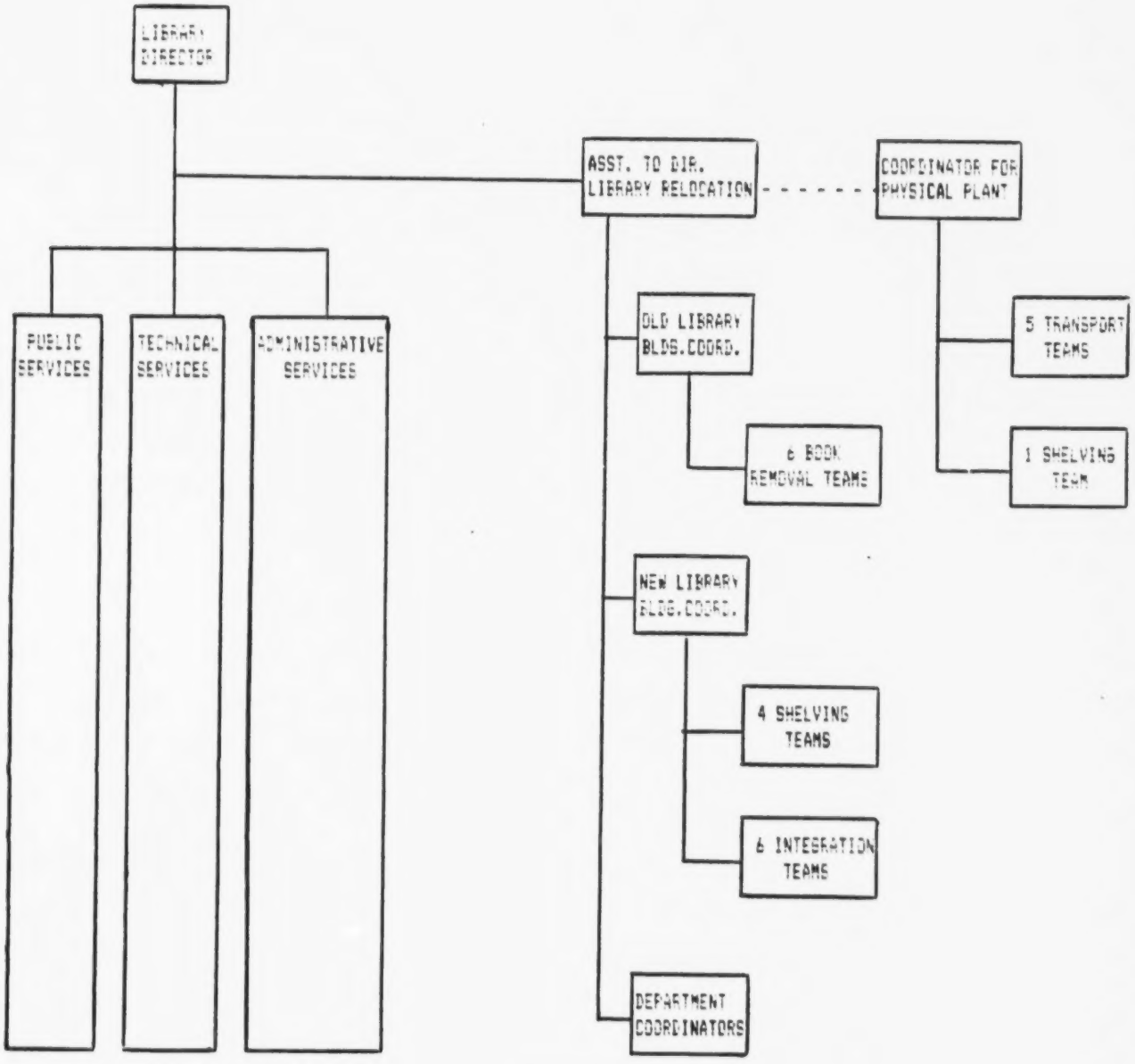
major contributions. Communications provided the information and training to allow staff to perform their jobs, gave them a context for the events of the move, kept them apprised of progress toward the goal, and permitted their interactions to solve problems as they arose.

PROJECT MANAGER'S RESPONSIBILITY VS. AUTHORITY

The amount of authority given to the project manager and project team may be unclear to other members of the organization. At the University of Tennessee, the title Assistant to the Director for Library Relocation was devised for the project manager precisely to give recognition to the fact that authority for move decisions was being vested in that position. In actual practice, however, a mismatch between the responsibilities and authority of the project manager frequently occurs. One reason is that the normal organizational structure is being overlaid with a new and different project structure.

In the typical hierarchical structure of libraries, the organization has clear line and staff relations, direction rests with the library director, and superiors have authority over subordinates. In a project organization, staff are drawn from various functional departments and reassigned to special duties. The project team must cross functional and organizational lines to get the special job done. Figure 2 illustrates the relation between the project organization and the normal organization of the UTK Library. These temporary organizational changes and the

Figure 2. Generalized organization chart for the University of Tennessee, Knoxville Library with project organization added.



human interaction problems they are likely to cause are major reasons for vigilant attention to the communication process and new communication networks that need to be developed. The project manager and team must find "ways to enhance authority and thus exert an increased influence over the project's destiny" (Dinsmore 1984, 120).

Consensus building with senior management prior to announcement or implementation of plans is a primary means of increasing the influence of the project team. Within a hierarchical structure, this operational mode is not new. However, it was interesting to see that in the UTK Library, operational decision-making for the move did remain with the project team. The director and associate directors, as apprised of plans, sought methods of support and facilitation rather than control. Their supportive actions lent authority and latitude to the project team while the library's normal administrative structure remained in place.

Another way to gain influence when authority isn't clear is to demonstrate confidence and expertise; simply letting the organization know what the project team is doing, when and how tasks are being completed, and schedules of work to be done is a way to demonstrate ability. For this and other reasons, we published the Relocation Bulletin, a monthly newsletter of two to six pages, for all library faculty and staff. Certain issues

were also distributed to campus faculty and administrators. This vehicle for news and information was also a perfect medium for giving recognition and praise to library staff who gave assistance to the project. Giving meaningful recognition for service is always important, and when done publicly, can aid the overall team spirit needed in a project environment. With the pressures found in a project office, control over the production schedule for such a news vehicle is vital. Freedom to issue news whenever there is sufficient quantity or need becomes a factor in replacing rumor with fact, and in building confidence, morale, and team spirit. Figure 3 provides a sample of the bulletin, illustrating the postive approach it took.

PARTICIPATIVE PLANNING AND DECISION-MAKING

The planning phase of a project is one of the longest and certainly one of the most important. In fact, planning frequently continues into the operational phase because of changes that require amending or replacing portions of a plan. "If planning is perceived as a vehicle for getting people to cooperate to meet goals, the process of planning takes on an expanded dimension. When performed jointly, planning clears communication channels and obliges participants to 'sign on'" (Dinsmore 1984, 75). Getting key project individuals to participate in the planning process is, therefore, an important objective for the project manager.

Figure 3. Sample of the Relocation Bulletin.

UNIVERSITY LIBRARIES

RELOCATION BULLETIN

Number 12 August 7, 1987

HODGES LIBRARY FIRSTS

1967

July 30 -- First staff member moved to the new building was BOB HARRISON. He moved his own desk one day early.

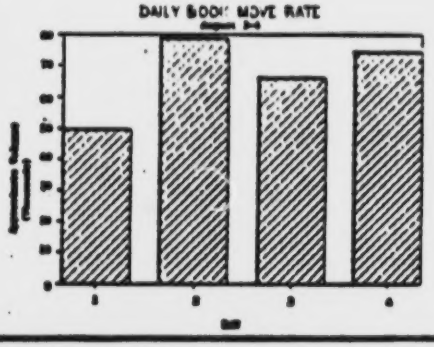
July 31 -- PAULINE BAYNE was the first of library personnel to eat lunch in the staff room.

August 3 -- THE HARBRACE COLLEGE HANDBOOK, the first book moved and shelved, was ceremonially placed by MRS. JOHN C. HODGES, assisted by CHANCELLOR REESE and LIBRARY DIRECTOR DONALD R. HUNT at 9:30 a.m.

August 4 -- First use of Geac (micro backup) to charge out a book was done by AMY HORTON.

August 5 -- JOE RADER was the first to refer to his office as a "sauna" when the air conditioning failed on the second floor.

August 6 -- First flood after library possession of the building occurred in an evening torrential rain. No damage to books or equipment. The book move was delayed only about an hour.



PROGRESS REPORT

For the first 4 days, we moved 98 percent of our goal.

Great work on the part of all involved.
Congratulations!

--Pauline

FOR FURTHER INFORMATION

Pauline Bayne, Assistant to the Director for Library Relocation
106 Hoskins Library / 974-2112

We chose to keep the core planning team small so that detailed work on logistics and procedures could be developed efficiently. Called the Logistics Group, it consisted of the project manager, two senior library staff members having extensive experience with stack management, supervision, and actual experience in moving collections and departments, plus the campus associate director for physical plant, whose regular participation gave immediate interface between the two organizations sharing responsibility for the move. Weekly meetings for a year before the first books were moved provided time to build trust among the planning team and between the two organizations. It also gave opportunities for development and testing of detailed working methods.

For the seven weeks of the move itself, the Logistics Group met daily in a problem-solving mode. Since each member of the group assumed a functional responsibility in the operational phase, these daily sessions brought key players together for face-to-face conflict resolution, revision of work plans and schedules, and a real chance to let off steam without having a negative impact on morale of the moving teams. The Logistics Group became an important support group for each of its members.

With the core team so small, however, it was even more important for the project director to have person-to-person and person-to-group discussions with many other administrators and groups of staff in the library. During the winter months of 1987

the project director met with each of the twenty-eight library department heads and his/her staff to learn the important relationships with other departments, to examine firsthand the equipment and furniture having special requirements for moving, and to give information and reassurance to staff members about the schedule and progress of the project. Information gathered in these meetings was used to determine the best sequence for the departmental moves to lessen or avoid interruption of their most critical links with other departments and systems. The information could have been gathered in a more efficient manner, but the advantages of clear, direct communication of departmental needs and an opportunity to hear new ideas about the move were deemed more important than efficiency at this stage. Small-group meetings consume a lot of time but return many benefits: information gain for all parties, increases in mutual trust, and higher individual and organizational confidence. The costs in time during the planning phase reap benefits during implementation.

At UTK, the series of departmental staff meetings was repeated in May and June but this time with the purpose of instruction. The Library Move Manual had been distributed, and it served as the basis for discussion. This instructional manual served as a resource for all staff during the move period. It gave instructions on packing, identified project staff and telephone numbers, provided schedules for collection and depart-

ment moves, outlined security procedures for the new building while it was closed to the public, and supplied recommendations for safety and responses to emergencies.

When it came time to recruit leaders from the library staff to head the sixteen move teams, recommendations for staffing came from the Logistics Group. Then these staff members were apprised of the responsibilities and opportunities involved and given the chance to accept or decline the role of team leader. Once all the leaders were named, a new working group was formed. For two months, the team leaders and project director met on a weekly basis to consider and make recommendations on such things as the overall move method, daily work routines, emergency supplies and routines, placement of limited telephones in the new building, handling of student timesheets, daily move logs, routines for family members to contact staff in case of emergency, etc. The opportunity to work through these kinds of details together meant the group was able to reach consensus on policies and procedures through participative decision making. It is likely that such involvement resulted in greater commitment of these important project personnel. Certainly it meant that the project director was assisted in making many small decisions and that communication of these decisions was accomplished more effectively through two-way communication than with a one-way training procedure.

INTERFACING THROUGH COMMUNICATION

An interface is the point at which independently working individuals, groups, organizations, or systems must relate or interact to accomplish project tasks or goals. Interface management, especially for problems occuring at the boundaries of defined responsibility, is a major project management function. Paul Dinsmore warns that "unless the project team is particularly well equipped to stave off an onslaught of conflicts and trouble throughout the project, boundaries must be spanned proactively, . . . and, interfacing offers a preventive approach for managing projects" (Dinsmore 1984, 106). Interfacing is more than coordinating the activities of individuals and groups; it relates primarily to handling people problems associated with differing goals, philosophies, managerial styles, and modes of operation. Since interfacing is accomplished through people, its success is certainly related to successful interpersonal and intraorganizational communication.

Architects, construction workers, circulation pages, facilities planners, reference librarians, and inexperienced book movers become interdependent groups when involved in the process of occupying a new library building, yet they have defined boundaries of responsibility and different methods of working. Problems arise between people when normally independent groups must work in an interdendent way. For instance, initial agreements had been made for the exclusive use of the three public

elevators and primary use of the freight elevator by book moving teams for five weeks beginning August 3. Amendments to these agreements were necessary to facilitate paging (delivering books to library users) and to allow late delivery of furniture and equipment. Prompt recognition of this problem and face-to-face conflict resolution stopped one area of potential dissatisfaction among the various project groups.

Once the move of books began, a primary interfacing method was a weekly meeting of all contractors still working in the building, the facilities planner, the move director, and physical plant coordintor. These meetings became a communication vehicle where current installation or move problems, scheduling difficulties, building access or security issues were shared for mutual resolution. Sometimes the discussion alone would spur a particular group to action because of new information or improved understanding, e.g., the wiring contractors returned to finish their work in Audiovisual Services because the carpet was being ruined by remaining too long in a pulled-back position. At other times, methods or work assignments of one group were altered to allow another group to complete its work, e.g., the shelving contractors agreed to affix end panels on stack ranges more rapidly when they understood how critical their work was to the premove shelf-marking process.

Some interface communications can be accomplished with formal structures such as training programs aimed at developing

common project goals and methods among people from different organizational settings. Brief but intensive training programs were developed for several levels of staff directly involved with moving books at UTK. Directives of university administration had required the move to be handled by library and physical plant staff plus temporary staff (primarily students) hired for a short period. Approximately 450 individuals were involved in the project, 200 of these working directly on the move of collection materials. With that number of people, either reassigned to or newly hired for move tasks, communication of basic concepts about the move became extremely important--to inform and to seek agreement for abiding by the systems established.

Training modules were developed using a variety of communication media (large group lectures with presentation graphics, small group meetings with team leaders, question-answer discussion sessions for supervisors, videotapes, hands-on simulations). Topics ranged from general information on safety, methods of keeping books in order (Library of Congress classification system), methods for handling and shelving books, and the overall move process to specific supervisory reporting structures or specific work routines for teams with differing functions.

FORMS AND DIRECTIONS OF COMMUNICATION

Communication, understood as the "flow of material, information, perceptions, and understandings between the various parts and members of an organization," (Vardamon & Halterman 1968, 4)

is central to managerial control and to organizational survival. In a project management environment, the key team members must attempt, consciously, to seek ways of using all aspects of communication to bring integration of project members so that common goals will be understood and tasks of the project completed within appropriate levels of quality, cost, and schedule. The following examples of communication forms and directions were utilized in the relocation of the UTK Library.

The public speech, one form of person-to-group communication, was used extensively during the project's planning phase for purposes of information and persuasion. Because the library's consituencies must endure the inconveniences of a library move, it is important to garner their support early in the process. If students and faculty understand the complexity of the undertaking, they are more likely to offer support instead of roadblocks when specific operational plans are announced. Speeches were made to the UTK Faculty Senate, college and department faculty, the Faculty Senate Library Committee, student government groups, the Panhellenic Council and Intrafraternity Council, and even to interested civic clubs.

In person-to-group communication the written message, whether on paper or in electronic form, probably comprises the majority of communication events. However, it is important not to use this form exclusively. Examples of this form at UTK were such things as move memoranda, which documented decisions on

policies and procedures; reports to senior administrators; budgets and progress reports, i.e., the Daily Move Log issued to all staff each day of the book and department moves; instruction manuals, such as the UTK Library Move Manual, Team Leaders Manual, the instructional packet for physical plant supervisors; and written informational pieces--news releases or articles in campus and local newspapers and newsletters.

Person-to-person communication is the single most prevalent and vital form of communication. Face-to-face discussions and correspondence between specific individuals occur almost continually in all organizational activities. In the project environment, where responsibility and authority are unclear and where conflict is likely, interpersonal communication skills certainly are tested. Project leaders must be perceptive, use negotiating skills, and most of all take the time for interpersonal communications. At UTK, the project manager's meetings with department heads and departmental move coordinators facilitated decision-making and support for decisions once reached.

The key element in person-to-person communication in a project, and probably in all organizational settings, is treatment of and respect for people as individuals, not as entities or as materiel. By the time the UTK team reached the implementation stage, staff throughout the library and physical plant were known by name; their quality of work and personalities were taken into account in reassignment to project tasks. To extend

the benefits of this personal approach to the hiring and assignment of new workers, the three library members of the Logistics Group did all of the interviewing of student move employees. The fact that the project team could identify personnel--truck drivers, pages, book movers, as well as supervisors--by name and consider their individual needs or abilities facilitated cooperation in the inevitable crises of the operation. The personal approach was essential to the UTK project, increasing the opportunities for successful communication and successful results.

Interpersonal interactions also frequently provide support mechanisms that are so important in a period of great change. The University of Tennessee Library was an organization that had been working in overcrowded conditions for years. It underwent four years of building planning and construction with all of the concomitant uncertainty of unknown facility, organizational, and personnel changes to come. In this already stressful environment, move planning and the move itself presented an almost unbearable degree of change and disruption for many staff members. The unplanned, serendipitous encounters between project team members and other staff in stairways, in the staff room, on the way to meetings across campus, offered the opportunity for sharing little bits of progress and news that brought encouragement and support to these staff. Library staff members also returned this type of communication, giving support and encour-

agement to the project team. Time spent in these short encounters, contributed mightily to an improved team spirit.

Intragroup communications such as conferences, meetings, and seminars are most successful when interactions occur so that communication is two-way rather than one-way. Small-group meetings, of the Logistics Group, team leaders, and contractors, were most effective when they incorporated participative planning, participative decision-making, or conflict resolution strategies. As such, these working sessions became major communications events that made a difference to the successful completion of the project.

The enhancing effect of graphics, in all forms of communication, was utilized whenever possible. Most speeches about the move were facilitated by the use of overhead transparencies, which provided floorplans, campus transportation routes, organization charts and the like. Training materials were illustrated whenever possible. Even the guide for shelving books on the various stack floors consisted of a visualization of each range of shelves bearing information for the call numbers, fill rates, and special notes pertinent to that particular group of shelves. Visual aids in the form of videotapes were used for training large groups of staff; in another setting they could have been used for individualized learning. Frequently progress was reported in the Relocation Bulletin with the use of bar and line graphs.

LESSONS FOR LIBRARIES OF TODAY AND TOMORROW

From the experience at the University of Tennessee, it is clear that special projects, even those with complex tasks involving large numbers of people, can be conducted without a completely new and separate organization. Communications networks can be forged to cross and go beyond existing organizational patterns in order to get the job done. Recognition of the critical importance of communication may help libraries today as they search for answers to problems which appear to reside in the organizational structure.

> The conscious recognition and use of communication networks in a highly flexible and goal-oriented manner [may be a practical way to overcome problems with an organization's structure.] Rather than treating organizational arrangements as fixed and immutable, short-lived "mini-organizations" within the parent organization emerge to meet particular goals. They strive to meet these goals, and then their membership is redispersed to meet other organizational goals. The person in charge of creating, directing, and dissolving these networks must have a clear and rational knowledge of the type of network that is required, the points of interface between the mini-organization and the larger parent organization, and the types of arrangements that are best suited to get certain goals accomplished (Farace 1977, 4).

Peter Drucker speaks of a similar situation in his predictions about the coming of information-based organizations, characterized by far more specialists and very few layers of management. He expects that traditional departments will serve functions in the areas of training and assignment of specialists but that the work will be done by task-oriented teams of specialists. The organization that evolves will probably go beyond

recent matrix structures and will certainly require "greater emphasis on individual responsibility for relationships and for communications" (Drucker 1988, 47). If libraries do evolve along these lines, communication skills will become more critical than ever.

The examination of management in the Japanese style, prevalent throughout the 1980s, has shown emphasis on consensus building with free interchange of ideas and opinions at all levels of the organization. People are viewed as the critical resource, and values of the organization are communicated through extensive training programs (Pascale & Athos, 28-57). The value of these attitudes was confirmed in the move experiences at UTK. The smooth operations and timely completion of the move were assignable to the fact that people knew what to do and how to do it. They had a vision of how their individual contributions were affecting the whole. Such a motivational milieu was achieved through interpersonal, multi-level, and multi-directional communication.

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